

Appl. No. 09/834,855
Amdt. dated August 12, 2005
Reply to Office Action of May 9, 2005

PATENT

REMARKS/ARGUMENTS

Claims 1-21 were pending and were variously rejected under 35 USC §102(e) as being anticipated by Barnett in view of Official Notice. Claim 19 was canceled, thus claims 1-18, 20 and 21 are now pending. In light of the remarks below, the undersigned respectfully traverses the rejections.

I. INITIAL MATTERS

Claims 1-21 were also provisionally rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-21 of copending Application No. 09/834,851.

In response, the undersigned respectfully requests that this provisional rejection be held in abeyance. If either or both of the copending applications are issued as patents before the present application issues as a patent, the undersigned is prepared to provide a terminal disclaimer in response to a non-provisional double patenting rejection.

Various amendments were also made to the claims to more clearly recite Markush-type claims. Such amendments were not made for purposes of patentability.

II. THE PRESENT INVENTION

The present invention relates to methods and systems for specifying promotions and distributing promotions across a computer network relying upon a unique and novel software architecture and mechanisms.

Initially, the specification distinguishes "promotions" or "electronic incentives" used herein from conventional "coupons." As described in the specification, page 15, lines 3-7:

These promotions are not considered "coupons" as "coupons" is understood in the industry. More specifically, in the industry, "coupons" are typically defined as detachable certificates, tickets, or the like that entitle the bearer or holder to a benefit. In the present embodiment, the customer and the merchant server are not given any such detachable and/or possessable certificate and cannot hold, bear, or present anything.

Additionally, the specification notes that coupons require possession of a cookie or the like:

By way of contrast, in one electronic couponing systems, a electronic coupon describing a right or benefit is created in a couponing server. The electronic coupon, or token, is then downloaded to a customer's computer system and stored. These coupons or tokens may be in the form of a cookie or the like stored on the customer's computer system. Much later, the customer may enter an electronic store that is independent of the electronic couponing system. Next, the cookie or token stored on the customer's computer system is retrieved and passed back to the electronic store web server. Because the customer's computer had "possession" of the cookie or token in the computer memory, the electronic store web server provides the customer the right or benefit or the bargain described, i.e. the customer is entitled to a 10% discount. This example thus illustrates that the electronic cookie or token incorporates the standard "coupon" model: the

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customer's computer memory stored the cookie, and possession of the cookie was a condition for receiving the bargain.

The background of the invention describes some problems with these possessable coupons. More specifically, one problem is that coupons for a product may be provided to users who were already going to buy the product, p2, lines 1-12:

A problem with traditional coupons includes that coupons often end up in the hands of buyers who are not targeted. This is because distributing coupons only to target buyers is virtually impossible. Although some coupons may be distributed to channels such as magazines, direct mailings, and the like that include a large percentage of target buyers, a significant percentage nevertheless reaches non-target buyers. These non-target buyers may include those willing to purchase the product even without the coupon. Accordingly, if non-target buyers uses the coupons to purchase a product, this directly reduces the amount of profit to the promoter. As an example, a promoter may create a promotion directed to Pepsi™ drinkers to try Coke™. To do so, the promoter offers coupons providing the bearer with a dollar off a six-pack of Coke™. However, it is virtually impossible to prevent a devoted Coke™ drinker from picking and redeem that coupon. This sort of common situation directly "siphons-off" manufacturer profits.

In light of this problem, the specification states that improved methods for providing targeted promotions are needed, without the problems highlighted above.

Many of the amendments to the claims and distinctions over the cited art depend upon an understanding of the following specific software concepts: As expressly described in the specification, "object-oriented" software programming techniques are used, p. 13, lines 27-28, such as Microsoft COM software objects. For example, service objects, coupon objects, product objects, are described and used.

The specification should be read and claims should be interpreted in light of the object-oriented environment described. Particular terms related to object-oriented software were defined and / or used in the specification consistently with how these terms are used in the software industry. The definitions of such terms in the software industry may override non-technical dictionary definitions of such words. For the Examiner's reference, particular definitions of terms are reproduced from the Microsoft Press Computer Dictionary, second edition, 1994 in attachment A to this amendment: object-oriented programming, object, instance, instantiate, and class.

Discussion of specific embodiments will be described below:

On p. 15, lines 32-35, the specification describes the merchant server invoking a Service object:

[T]he merchant server invokes a Service object within the application server to evaluate the customer's shopping category to determine if there [are] any coupons to display, step 560.

On p. 15, line 35 - p. 16, line 2, the specification describes the application server instantiating coupon objects:

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In response to the current shopping category, the application server determines whether any promotions are applicable and if so, one or more "Coupon Objects" are instantiated, step 570.

On p. 16, lines 13-17, the specification describes the merchant server querying the instances of the coupon objects:

Next, merchant server 140 queries one or more "Coupon Objects" that have been instantiated for a description of the pre-conditions and benefit, a[n] image of the product, and the like, step 620. In response, merchant sever 140 specifies the rendering of the promotion on an HTML page for display on the customer's display, step 630.

On p. 17, lines 10-14, the specification describes the merchant server invoking another service object;

When the consumer desires to checkout, merchant server 140 causes application server 180 to use the instances of "Coupon Objects" that were created, step 710. In particular, an evaluate method of a Service object is invoked, and the amount of savings is calculated. The savings is then retrieved by merchant server 140 and displayed to the consumer, step 715.

In the present embodiment, when the consumer checks out, a promotion usage condition, application server 180 stores data associated with the transaction, step 720. The savings [are] then retrieved by merchant server 140 and displayed to the consumer, step 715.

The claims, as amended, incorporate at least some of the object-oriented concepts discussed above. For example, claim 1, now recites:

receiving usage data of the electronic incentive from the application server, wherein the usage data is determined in response to a promotion usage condition of an instance of the electronic incentive indicated by the application server;

wherein the instance of the electronic incentive is instantiated in response to a invocation of a method on a service object stored in the application server by the merchant server;

wherein the instance of the electronic incentive is stored in the application server and is queried by the merchant server;

wherein the merchant server specifies rendering of the data associated with the electronic incentive in response to a query of the instance of the electronic incentive;

wherein the promotion usage condition is indicated in the application server when a user coupled to the merchant server fulfills pre-conditions of the instance of electronic incentive.

For example, claim 8, now recites:

invoking an evaluation service object within an application server coupled to the merchant server for promotions, wherein an instance of a promotion object is created in the application server in response thereto ;

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querying the instance of the promotion object within the application server for a description of the promotion, wherein the description includes pre-conditions, a user benefit and an output representation of the promotion;

invoking a savings method in a service object within the application server to determine a savings amount, wherein the savings amount comprises the user benefit when the selection of the at least one item fulfills the pre-conditions.

For example, claim 15, now recites:

creating an instance of the electronic incentive for the user in response to an invocation of an evaluation service object by a merchant server for determining electronic incentives for a user;

receiving a query for a description of the instance of the electronic incentive from the merchant server wherein the description includes the pre-condition and the benefit;

receiving an invocation of an amount of savings method of a service object from the merchant server to determine a savings for the user, wherein when an item placed in a shopping cart associated with the user in the merchant server fulfills the pre-condition, the amount of savings method indicates the benefit to the user in the merchant server.

III. BARNETT

Barnett is described as a method and system for the electronic distribution of coupons to consumers. Specifically Barnett appears to describe methods and systems where coupons bundles are provided to consumers via service providers.

Importantly Barnett does not refer to using an object-oriented paradigm. Instead, Barnett appears to simply rely upon simple procedural calls.

Additionally, Barnett appears to only refer to providing and redeeming conventional "coupons." Barnett, Fig. 9 includes a sample flow chart. In one step, the remote computer receives and stores variable "coupon data." Next, the coupon data is printed out and redeemed in-person, or the coupon is electronically redeemed. More specifically, the specification states on col. 9, lines 41-45.:

The requested coupon data package and associated advertising materials are transmitted by the online service provider 2 to the personal computer 6, where it is stored in the downloaded coupon data file 30a in the coupon database.

Next, the user prints out the coupons for redemption, col. 10 lines 58-60:
Coupons are printed by the printable coupon data generation routine 32d, which is invoked by a user when he selects a print command from the coupon file function 56.

In the case of electronic redemption, the coupon is electronically transferred, col. 1, lines 38-44.:

This is especially useful in the "electronic shopping mall" environment now found in many online services. The electronic coupon data could also

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be routed via the data communications interface 20 to a retail store where the user will be shopping, where the coupon data is held in a buffer pending purchase by the user of the matching product.

To address the problem of unauthorized use or duplication of these coupons, Barnett describes using user-specific data in a bar code 90. Col. 7, line 24-25. Further, Barnett describes:

The unique user bar code 90 also renders the electronic coupon system of the present invention secure and virtually fraud-proof. Although a user is able to print out a particular coupon 18 only once (to be described in detail below), the coupon issuer 14 could still be defrauded by a user or retailer who might photocopy a printed coupon numerous times and fraudulently and repeatedly present it for redemption. However, in accordance with the present invention, each coupon printed by a user is unique, and the scanning of a coupon presented for redemption will be stored at the coupon redemption center. Thus, the coupon issuer will know if a particular user has redeemed a particular coupon and thus disallow further redemption of a photocopied coupon bearing the same indicia.

However, in Barnett, because a user possesses these coupons, a user may still print-out a coupon for a product and give it to another user, who would have purchased the product even without the coupon. Accordingly, the manufacturer's profits may still undesirably be "siphoned-off" by these actions.

IV. BARNETT DISTINGUISHED

A. Claim 1

Barnett fails to disclose every element of claim 1.

More particularly, Barnett fails to disclose receiving usage data of the electronic incentive from the application server, wherein the usage data is determined in response to a promotion usage condition of an instance of the electronic incentive indicated by the application server.

Further, Barnett fails to disclose wherein the instance of the electronic incentive is instantiated in response to a invocation of a method on a service object stored in the application server by the merchant server, and wherein the instance of the electronic incentive is stored in the application server and is queried by the merchant server.

Additionally, Barnett fails to disclose wherein the merchant server specifies rendering of the data associated with the electronic incentive in response to a query of the instance of the electronic incentive, and wherein the promotion usage condition is indicated in the application server when a user coupled to the merchant server fulfills pre-conditions of the instance of electronic incentive.

As discussed above, Barnett fails to disclose anything about an implementation using an object-oriented approach and / or objects. Barnett simply describes that coupon data are simply downloaded from a online service provider to a user at a personal computer. Once the

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coupon data is on the personal computer in Barnett, the on line service provider loses control of the coupon.

In contrast, the claimed limitations describe the merchant server querying instances of coupon objects stored on an application server, not disclosed in Barnett. Further, as recited above, the application server determines whether the promotion usage condition is fulfilled or not.

In light of the above, and for other reasons, Barnett fails to disclose all elements of claim 1. Accordingly, Barnett does not anticipate claim 1.

B. Claim 8

Barnett fails to disclose every element of claim 8. More specifically, Barnett fails to disclose the limitations of invoking an evaluation service object within an application server coupled to the merchant server for promotions, wherein an instance of a promotion object is created in the application server in response thereto, querying the instance of the promotion object within the application server for a description of the promotion, wherein the description includes pre-conditions, a user benefit and an output representation of the promotion, and invoking a savings method in a service object within the application server to determine a savings amount, wherein the savings amount comprises the user benefit when the selection of the at least one item fulfills the pre-conditions.

As discussed above, Barnett fails to disclose anything about an implementation using an object-oriented approach and /or objects. Instead, Barnett simply describes that coupon data are simply downloaded from a online service provider to a user at a personal computer.

In contrast, the claim language above illustrates object-oriented concepts, not disclosed in Barnett, as well as specific usages of software objects.

In light of the above, and for other reasons, Barnett fails to disclose all elements of claim 8. Accordingly, Barnett does not anticipate claim 8.

C. Claim 15

Barnett fails to disclose every element of claim 15. More specifically Barnett fails to disclose a method for an application server including creating an instance of the electronic incentive for the user in response to an invocation of an evaluation service object by a merchant server for determining electronic incentives for a user, receiving a query for a description of the instance of the electronic incentive from the merchant server wherein the description includes the pre-condition and the benefit, and receiving an invocation of an amount of savings method of a service object from the merchant server to determine a savings for the user, wherein when an item placed in a shopping cart associated with the user in the merchant server fulfills the pre-condition, the amount of savings method indicates the benefit to the user in the merchant server.

As discussed above, Barnett fails to disclose anything about an implementation using an object-oriented approach and /or objects. Instead, Barnett simply describes that coupon data are simply downloaded from a online service provider to a user at a personal computer.

In contrast, the claim language above illustrates the object-oriented nature of embodiments of the present invention, not disclosed in Barnett, as well as the usage of such software objects within the application server.

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In light of the above, and for other reasons, Barnett fails to disclose all elements of claim 15. Accordingly, Barnett does not anticipate claim 15.

D. Remaining claims

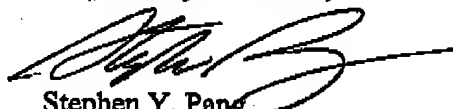
Claims 2-7; 9-14; 16-19 and 21, dependent upon claims 1, 8, and 15, respectively, are also asserted to be allowable for substantially the same reasons as claims 1, 8, and 15, respectively, and more specifically for the specific limitation they recite.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (650) 326-2400.

Respectfully submitted,


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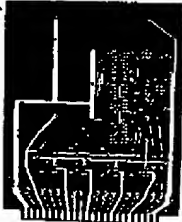
C

clean room

transconduct to perform a particular task. At one level, a computer consists of a single circuit in another, it consists of hundreds of interconnected circuits.

Circuit analysis may be done for recording one or more characteristics of an electrical circuit. Voltage, current, and resistance are the characteristics most commonly measured. Oscilloscopes and multimeters are circuit analyzers.

Circuit board A flat piece of insulating material such as epoxy or phenolic resin, on which electrical components are mounted and interconnected to form a circuit. See the illustration. Most modern circuit boards use patterns of copper foil to interconnect the components. The foil layers may be on one or both sides of the board and, in some advanced designs, in several layers within the board. A printed circuit board is one in which the pattern of copper foil is laid down by a printing process such as photoimaging. See also printed circuit board.



Circuit board

Circuit breaker A switch that opens and cuts off the flow of current when the current exceeds a certain level. Circuit breakers are placed at electrical points in circuits to protect against damage that could result from excessive current flow, which is typically caused by component failure. Circuit breakers are often used in place of fuses because they need only to be reset rather than replaced. See also surge protector.

Circuit card See circuit board.

Circuit switching A method of opening commu-

nication lines, so through the telephone system, by creating a physical link between the talking and receiving parties. In circuit switching, the connection is made at a switching center, which physically connects the two parties and maintains an open line between them for as long as needed. Circuit switching is typically used in modern communications on the dial-up telephone network, and is also used on a smaller scale in privately owned business communication networks.

Compartmentalized communication network. A communication network in which each node or character has a type of linked or chained list in which preceding contents, such as a flag, through all links and returns to the starting point, no matter where that point is located in the list. See also linked list.

CISC. Personalized "chip", abbreviation for complex instruction set computing. A phrase describing a processor that uses complex instructions at the assembly language level. The instructions can be very powerful, allowing for complicated and flexible ways of calculating such elements as memory addresses. All this complexity usually requires many clock cycles to execute each instruction. Compare RISC.

Class In object-oriented programming, a generalized category that describes a group of more particular objects, called objects, that can exist within it. A class is a descriptive tool used in a program to define a set of attributes or a set of services (actions available to other parts of the program) that characterize any member (object) of the class. Program classes are comparable to concepts in the types of syllogistics people use, often unconsciously, to organize information—one familiar example being the categories animal (regarding and invertebrate), which define the physical world and programs (classes), such categories define the types of objects they contain and the ways those objects behave. The definition of classes in object-oriented programming is comparable to the definitions of types in languages such as C and Pascal. See also object-oriented programming.

Clean room A room in which dust and other small particles are filtered from the air and in which production clothing is worn to avoid contamination.

has within program

I

hardware

Installation program A program whose function is to install another program, either on a storage medium or in memory. An installation program might be used to guide a user through the often complex process of setting up an application for a particular combination of machine, printer, and scanner. Installation programs are also used when an application is copy-protected and cannot be copied by normal operating-system commands. Such installation programs typically limit the number of copies that can be installed to make a copy that has been installed on one machine to another machine; the user must deinstall a copy and reinstall it on the other machine (often with the same installation program).

Installer A program provided by Apple with each new release of the Macintosh operating system. The installer allows the user to install system updates and to make bootable (system) disks.

Instance In object-oriented programming, an object. For example, if you define a class called *cat* and then create (allocate memory for) a *cat* object, that object is an instance of the *cat* class. See also class, instance variable, instance method.

Instance variable In object-oriented programming, a variable associated with an object, which is an instance of a class. If a class defines a certain variable, then each instance of that class has its own copy of that variable. See also class, instance, object, object-oriented programming.

Instantiate In object-oriented programming, to create an instance of a class. See also class, instance, object.

Interpretation An action performed by a computer language (such as, assembly, high-level, or low-level) program that often occurs with reference to several languages. Most programs can be broken down into two types of statements: instructions and declarations. See also declaration, statement.

Instruction code See operation code.

Instruction counter See instruction register.

Instruction cycle The process in which a microprocessor receives an instruction from memory, decodes it, and carries it out. An instruction cycle

consists of two parts, the instruction (fetch) time and the execution (execute and execute) time. An instruction cycle is measured by the number of clock ticks (pulses of a computer's internal timer) that a particular instruction consumes. See also cycle.

Instruction set The set of instructions that a particular computer can execute. The instructions are usually organized into groups, such as arithmetic, logical, control, and so on. Grouping the instructions into sets is useful to designers of control processing units (CPUs) because it allows them to determine which instructions should be stored to yield the greatest speed. Similarly, knowledge of instruction sets is useful to people designing benchmarks because it enables the designers to make benchmarks relevant to real tasks.

Instruction pointer See program counter.

Instruction set The set of instructions that a microprocessor recognizes and can execute. An instruction set includes low-level, assembly-language instructions, such as add, subtract, multiply, and divide. Each microprocessor has its own instruction set. In some instances, an instruction set is defined more broadly to include instructions in programming languages as well. See also assembly language.

Instruction time Abbreviated *time*. The number of clock ticks (pulses of a computer's internal timer) that a microprocessor requires to receive an instruction from memory. Instruction time is the first half of an instruction cycle, the second half being the execution (execute and execute) time.

Instruction word The length of a machine language instruction, or the instruction itself, which typically consists of a code identifying the type of instruction, one or two operands (which might be directly addressed), and one or two other purposes, such as for branching or assembly, machine code. See also operand.

Intel Pentium QM64 called microcontroller. Any device that is a very poor conductor of electricity.

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